From
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Oral Statement of Harold S. Bradley

Vice President and Director of Equity Trading

American Century Investment Management

[illegible]

Before the

Subcommittee on Finance and Hazardous Materials

Committee on Commerce

U.S. House of Representatives

on

The "Common Cents Stock Pricing Act of 1997"

H.R. 1053

April IO.1997

I am Harold Bradley, Vice President and Director of Equity Trading for American Century Investment Management, the management company for the American Century, Twentieth Century and Benham families of mutual funds. My job is to represent and defend the interests of shareholders in trades "brokered" with Wall Street and thereby maximize investment returns. During our last fiscal year, we traded more than three billion shares and more that $75 billion of U.S. and foreign equities. Our shareholders paid commissions of about $110 million. I am pleased to be here today to testify in support of H.R. 1053. Thank you Chairman Oxley, Representative Markey for this opportunity. I also thank both of you, and others who have sponsored this bill, for the benefits it will confer upon all investors. Without the interest of Congress, this issue will continue to languish.

We manage more than $40 billion in equity funds for more than two million shareholders. They trust us with retirement savings in IRA and 401(k) investment accounts; with investments to fund college education for their children; with investments in small and medium capitalized growth companies that could one day drive the nation's economy. We work for common people who provide the liquidity upon which we base our nation's admired capital formation process.

This bill, as proposed, will allow for more transparent pricing in the nation's securities markets and a reduction in excess trading costs now charged to investors. At American Century, we already have saved our investors hundreds of millions of dollars because of our commitment to trading systems which both reduce spreads by "splitting the eighth" and offer anonymity; last year American Century transacted more than 600 million shares in such venues (appendix A4-A7).

We believe we could further increase these savings to our investors if Congress enacted "The Common Cents Stock Pricing Act." Rules long on the books of this nation's major self-regulatory organizations inhibit meaningful competition among global systems and markets. If we are to remain a model for the world's capital markets, we must break down barriers to competition and support efficient technologies to lower the cost of capital.

<u>Decimal Prices Will Yield Real Returns to Investors</u>

1. American Century data indicates that narrower spreads and anonymous access save our investors as much as $300 million in transaction related costs which are then reinvested in the market ; savings of this magnitude attach to only 30% of the trades made on behalf of our investors.
2. Decimal pricing would serve to make costs of services more explicit and should rationalize payment for order flow and soft dollar practices. The equivalent of 1/16 (.0625) has traditionally been the charge assessed by market makers to customers in the NASDAQ stock market.
3. Various nontraditional trading systems have offered trading in increments finer than 1/8 for years. Instinet offers trading in increments as fine as 1/64 (.015625) as does NASDAQ's own SelectNet system. Dealers and organizations regularly distribute easy to read, branded tables showing the decimal equivalent of difficult fractions (appendix A3).
4. We are a mutual fund with about $7 billion invested in non-U.S. markets. We price and trade equities in every world market, except our own, in decimals. Foreign exchange markets price in decimals to four places.

5. We have established connectivity with brokers around the world. We staff a trading operation in Singapore. It makes little sense to squander precious programming resources to make systems "understand" eighths when the rest of the world "speaks" decimals in trading markets.
6. We, as well as other mutual funds, price daily in decimal form for investors. Brokers report a "batched" average price of all individual trades made for institutional clients during a day and the broker's back office sends a trade confirmation that is priced to four digits.
7 The New York Stock Exchange has announced an ambitious plan to recruit and list foreign companies and to offer trading in a company's local currency. That would require decimal pricing to be successful.
8. Narrowing trading increments will not de facto narrow spreads unless one assumes that current spreads are, in fact, too wide. The ability to quote stocks in penny or nickel increments will not drive spreads to those levels; minimum 1/8 spreads in existing markets have not eliminated spreads which range from .25 to $1.50 in both exchange-listed and NASDAQ markets. One cannot suspend economic principles governed by the elasticity of supply and demand.
9. Survey after survey indicates strong institutional and retail preference for pricing conventions **consistent with the way we purchase shoes, medicine and bread.**
10. Decimalization will avoid the numerous technical problems associated with the use of a "rounding indicator" under the SEC's new order handling rules. In seeking "best price," many systems geared to retail investors and linked with Internet technology will be unable to prioritize a rounding indicator.

Some have argued that Congress should defer legislation pending further study of this issue. A similar argument was made following extensive SEC commentary about decimalization in the Market 2000 report more than 3 years ago. There exists considerable evidence to support the immediate adoption of decimal pricing practices in the stock market.

In addition, recent press reports have correctly reported the strong consensus expressed by the NASDAQ Quality of Markets Committee that trading in narrower spreads (specifically 1/16ths) would be positive for investors. The American Stock Exchange also plans to introduce trading in 16ths. On more than one occasion, senior staff members of major exchanges have suggested privately that "biting the bullet" now on decimalization would be far more preferable than expensive, short-lived interim steps on the way to an otherwise unavoidable technological outcome. To those who might complain of high short term costs of conversion, I would counter that the surge in popularity of equity investments in this country provides the capital to improve the infrastructure.

It is a great and unfortunate irony that the NYSE, the most visible symbol of free enterprise, competition and the fruits of capitalism, relies on fixed spreads and monopoly structures (e.g. the Intermarket Trading System (ITS), NYSE rule 390) to erect sizable barriers to technological solutions and free competition among markets. One should not confuse the true source of capital formation and liquidity – our investors -with the exchanges and intermediaries who claim to be the "envy of the world."

Further Steps to Reform the Markets are Needed

The recent SEC-mandated order handling rules recognize the technological revolution taking place in our equity markets. The rules mandated visibility of prices to the investing public which had been routinely available only to sophisticated investors and market "insiders" for many years. The rules facilitated competition among new electronic brokers and NASDAQ dealers. At the same time, the inability to electronically "link" with the NYSE thwarted similar progress in the display of listed equity prices. While listed stocks regularly trade at increments narrower than an eighth on Electronic Communication Networks (ECNs) such as Instinet, retail investors cannot see or act upon these prices unless they happen to be a subscriber to these systems. This seems to fly in the face of Congressional intent to establish a National Market System for stocks as outlined in the 1975 amendments to the Securities Exchange Act.

A move to decimals alone will be an empty gesture to investors if exchanges refuse to grant point of sale access with strict price time priority structures; the combination of fixed spreads and muddy priority schemes on the floor of the NYSE preserve inefficient intermediaries and perpetuate high cost access for investors. This requires Congressional support of ITS structural reform and a close examination of the Consolidated Quote System and other imbedded structures which affect the display and delivery of stock price information to the public. Furthermore, the "breaking of the eighth" should also break down exchange resistance to full display of a stock's supply and demand schedule, a strong and long expressed preference of the investor community.

I appreciate the opportunity to appear before you today and I am heartened by this common sense, investor friendly approach to financial markets. I would be happy to answer any questions. Thank you.

LIST OF EXHIBITS

EXHIBIT 1

AMERICAN CENTURY℠

What's the Highest Price?

20 11/16 **20 5/8** **20 22/64**

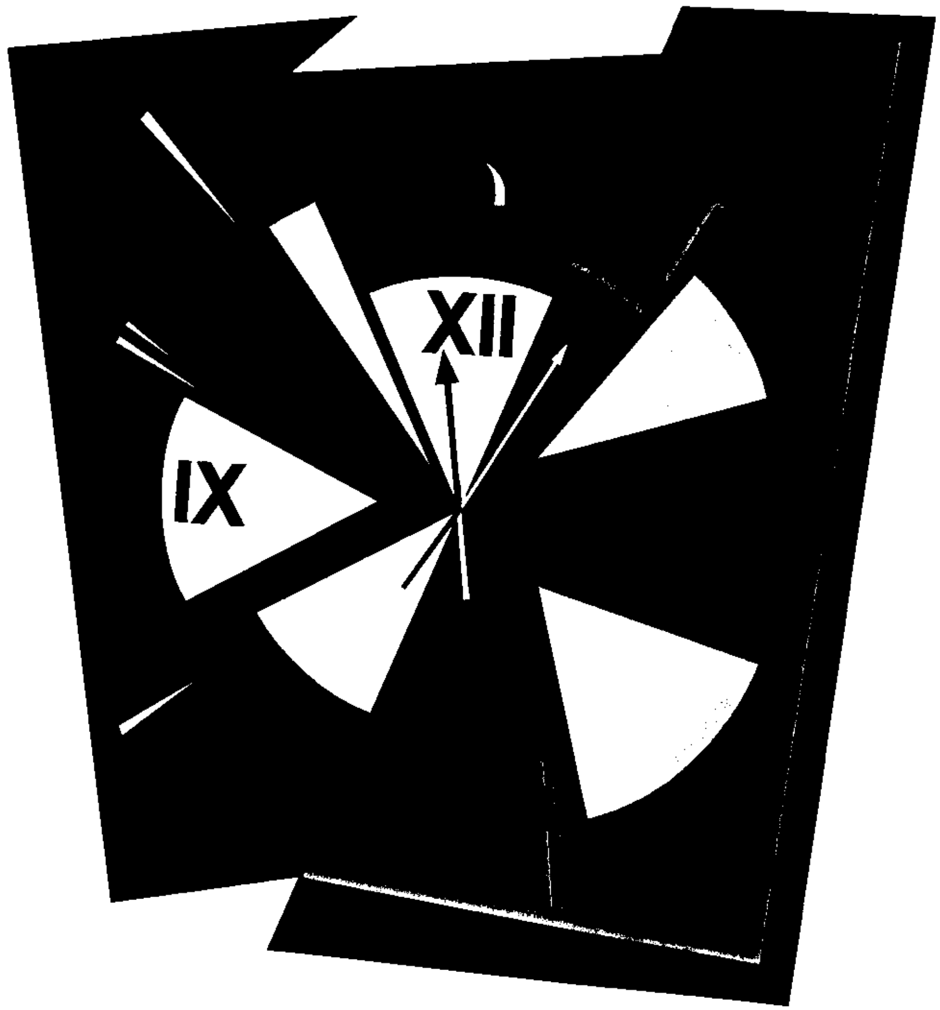


EXHIBIT 2

AMERICAN
CENTURY

What's the Highest Price?

20.69 20.63 20.34

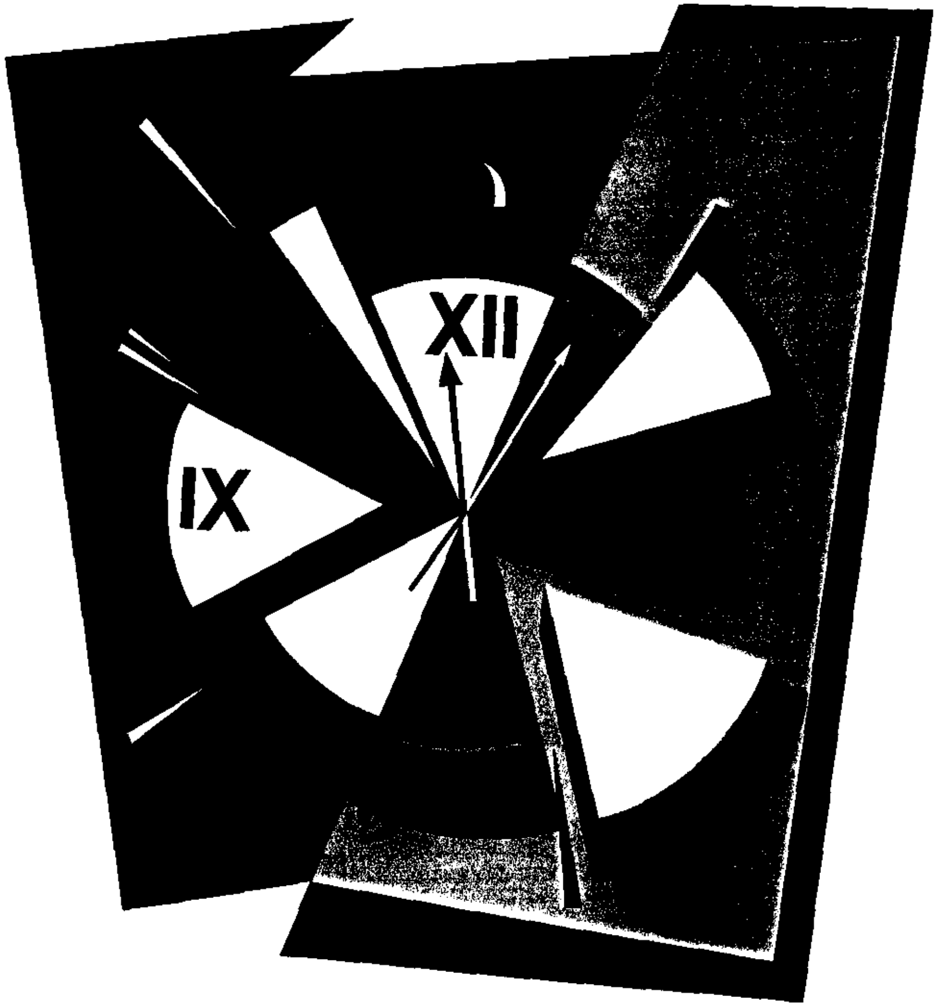
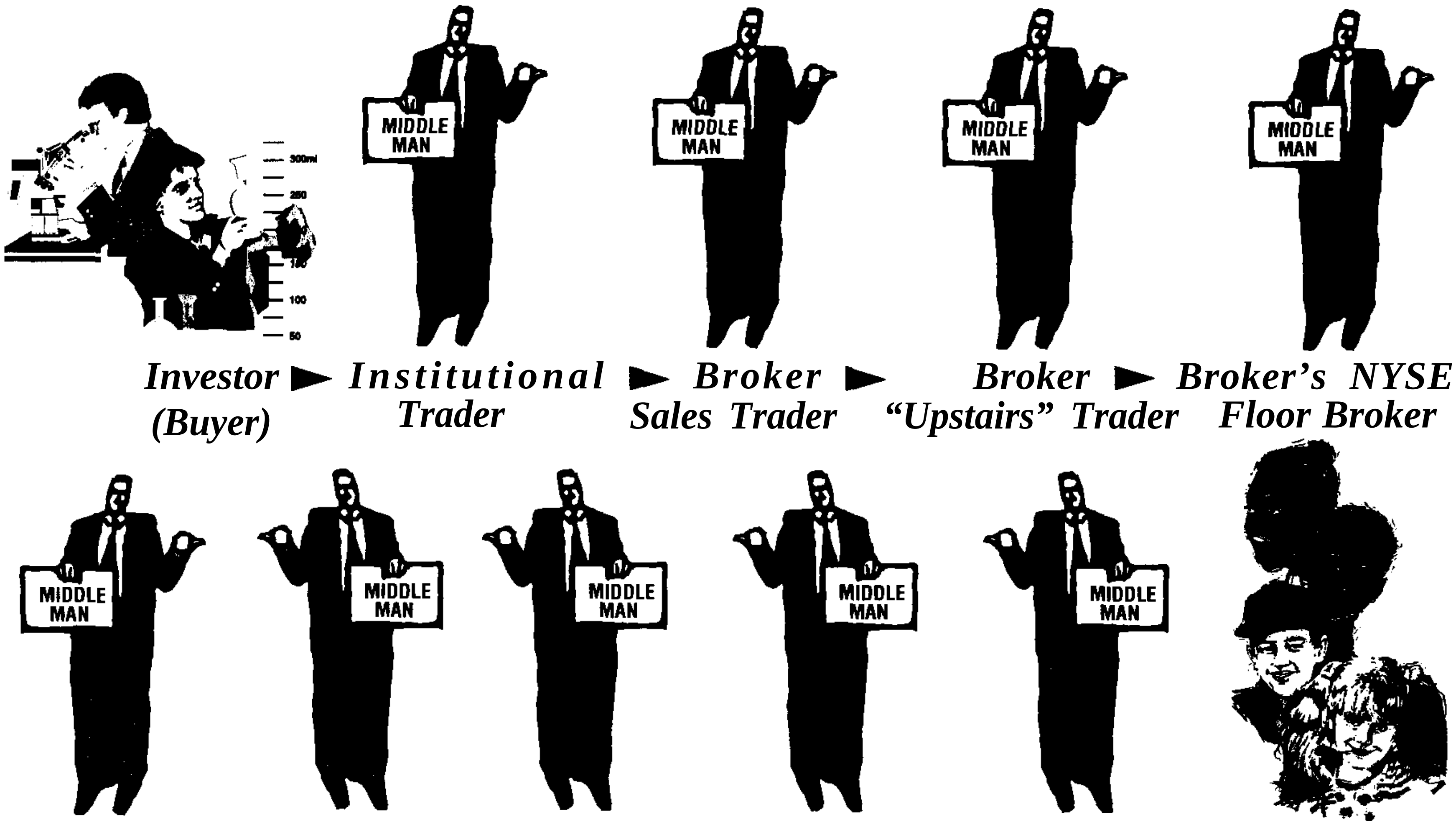


EXHIBIT 3

AMERICAN CENTURY

Life Cycle of an Order



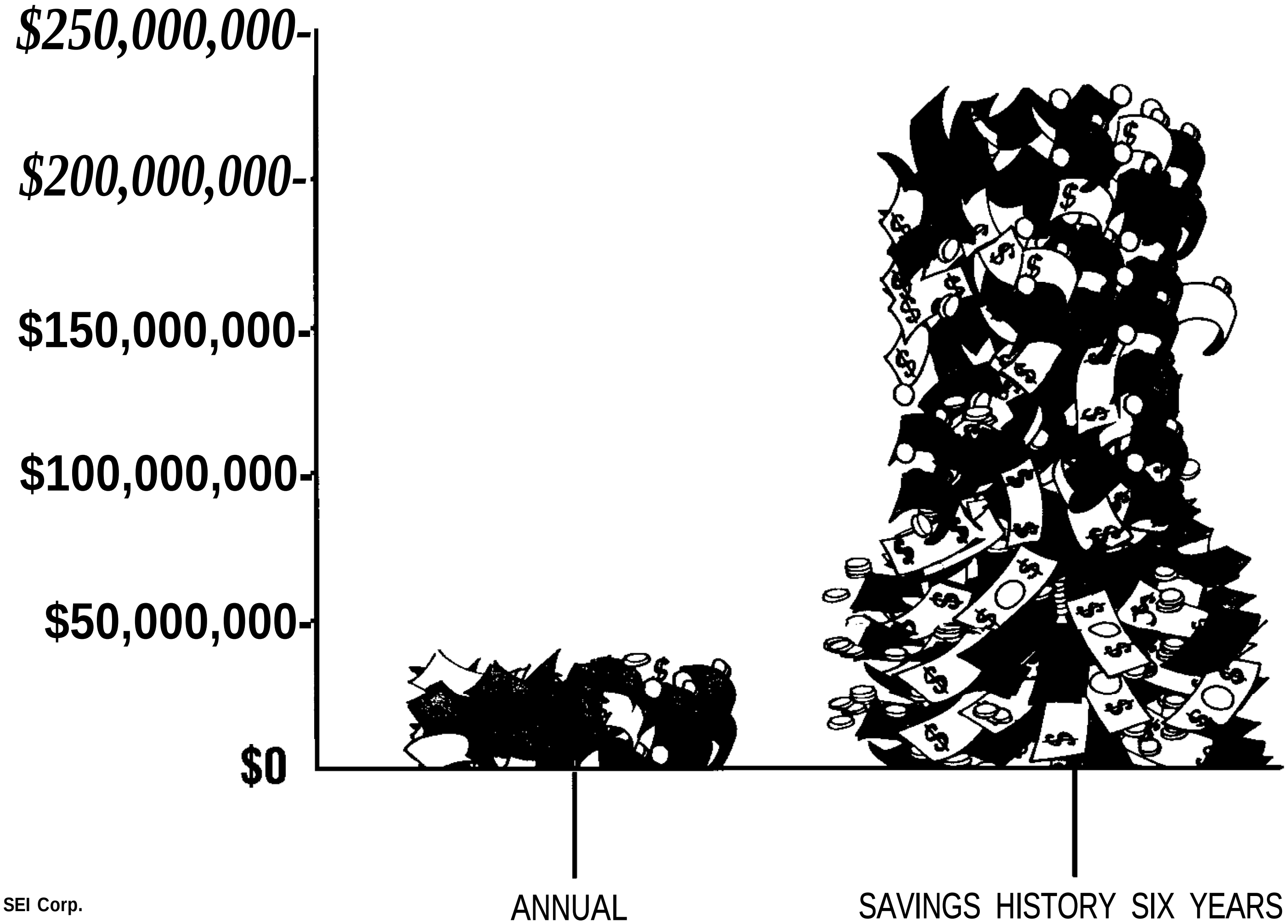
Investor (Buyer) ► ***Institutional Trader*** ► ***Broker Sales Trader*** ► ***Broker "Upstairs" Trader*** ► ***Broker's NYSE Floor Broker***

Specialist ◄ ***Floor Broker*** ◄ ***"Upstairs" Trader*** ◄ ***Sales Trader*** ◄ ***Institutional Trader*** ◄ ***Investor (Seller)***

AMERICAN CENTURY

EXHIBIT 4

Estimated Investor Savings from "Splitting the Eighth"

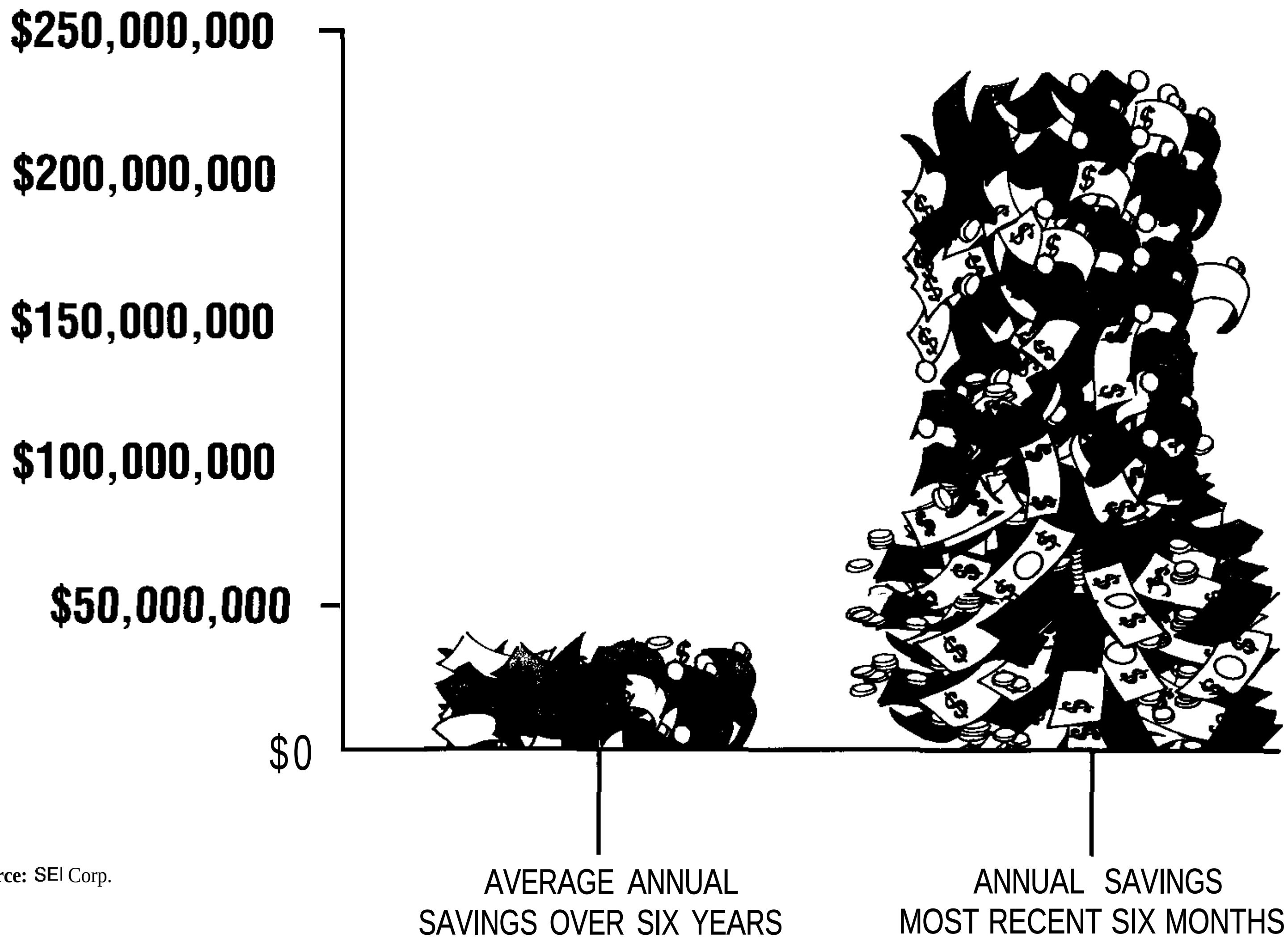


Source: SEI Corp.

EXHIBIT S

AMERICAN CENTURY

Estimated Investor Savings



Source: SEI Corp.

AMERICAN CENTURY

Characteristics of an Investor's Trading System

	Yes	No	Don't Know	N.A.	Total	Yes
Order Anonymity	43	0	0	1	44	98%
Maximum Order Confluence	38	1	0	5	44	88%
Decimal Prices	33	10	0	1	44	75%
Time Priority of entered orders within price	38	2	4	0	44	83%
Single price auction at opening	31	8	2	3	44	70%
Full, but anonymous, disclosure of supply/demand schedule	40	1	0	3	44	91%
Free entry and exit by those offering microliquidity	37	5	2	0	44	84%
Multilateral price negotiation capability	39	1	1	3	44	89%
Integration of price discovery, execution and transaction reporting	43	0	0	1	44	98%

Source: Trader Forum, February 2, 1995,
Junius W. Poake, University of Northern Colorado.

AMERICAN CENTURY

Characteristics of Current Exchange Structures

	NYSE/ITS	NASDAQ *	Instinet
Order Anonymity	NO	YES*	YES
Maximum Order Confluence	NO	NO	YES
Decimal Prices	NO	NO	YES*
Time Priority of entered orders within price	NO	NO	YES
Single price auction at opening	NO	NO	NO
Full, but anonymous, disclosure of supply/demand schedule	NO	NO	YES
Free entry and exit by those offering microliquidity	NO	YES*	YES
Multilateral price negotiation capability	YES**	YES*	YES
Integration of price discovery, execution and transaction reporting systems	NO	NO	NO

*Only after SEC-Mandated "ECN Rule." Source: Trader Forum, February 2, 1995, JP Modified
**Junius W. Poake, University of Northern Colorado.

TraderForum

1/64	.0156	17/64	.2656	33/64	.5156	49/64	.7656
1/32	.0312	9/32	.2812	17/32	.5312	25/32	.7812
3/64	.0469	19/64	.2969	35/64	.5469	51/64	.7969
1/16	.0625	5/16	.3125	9/16	.5625	13/16	.8125
5/64	.0781	21/64	.3281	37/64	.5781	53/64	.8281
3/32	.0938	11/32	.3438	19/32	.5938	27/32	.8438
7/64	.1094	23/64	.3594	39/64	.6094	55/64	.8594
1/8	.1250	3/8	.3750	5/8	.6250	7/8	.8750
9/64	.1406	25/64	.3906	41/64	.6406	57/64	.8906
5/32	.1562	13/32	.4062	21/32	.6562	29/32	.9062
11/64	.1719	27/64	.4219	43/64	.6719	59/64	.9219
3/16	.1875	7/16	.4375	11/16	.6875	15/16	.9375
13/64	.2031	29/64	.4531	45/64	.7031	61/64	.9531
7/32	.2188	15/32	.4688	23/32	.7188	31/32	.9688
15/64	.2344	31/64	.4844	47/64	.7344	63/64	.9844
1/4	.2500	1/2	.5000	3/4	.7500	1	1.0000

Numbers have been rounded to the fourth decimal.

Serving the
Buyside Trading Community

1/64	.015625	33/64	.515625
1/32	.03125	17/32	.53125
3/64	.046875	35/64	.546875
1/16	.0625	9/16	.5625
5/64	.078125	37/64	.578125
3/32	.09375	19/32	.59375
7/64	.109375	39/64	.609375
1/8	.125	5/8	.625
9/64	.140625	41/64	.640625
5/32	.15625	21/32	.65625
11/64	.171875	43/64	.671875
3/16	.1875	11/16	.6875
13/64	.203125	45/64	.703125
7/32	.21875	23/32	.71875
15/64	.234375	47/64	.734375
1/4	.25	3/4	.75
17/64	.265625	49/64	.765625
9/32	.28125	25/32	.78125
19/64	.296875	51/64	.796875
5/16	.3125	13/16	.8125
21/64	.328125	53/64	.828125
11/32	.34375	27/32	.84375
23/64	.359375	55/64	.859375
3/8	.375	7/8	.875
25/64	.390625	57/64	.890625
13/32	.40625	29/32	.90625
27/64	.421875	59/64	.921875
7/16	.4375	15/16	.9375
29/64	.453125	61/64	.953125
15/32	.46875	31/32	.96875
31/64	.484375	63/64	.984375
1/2	.5	1.0	1.0

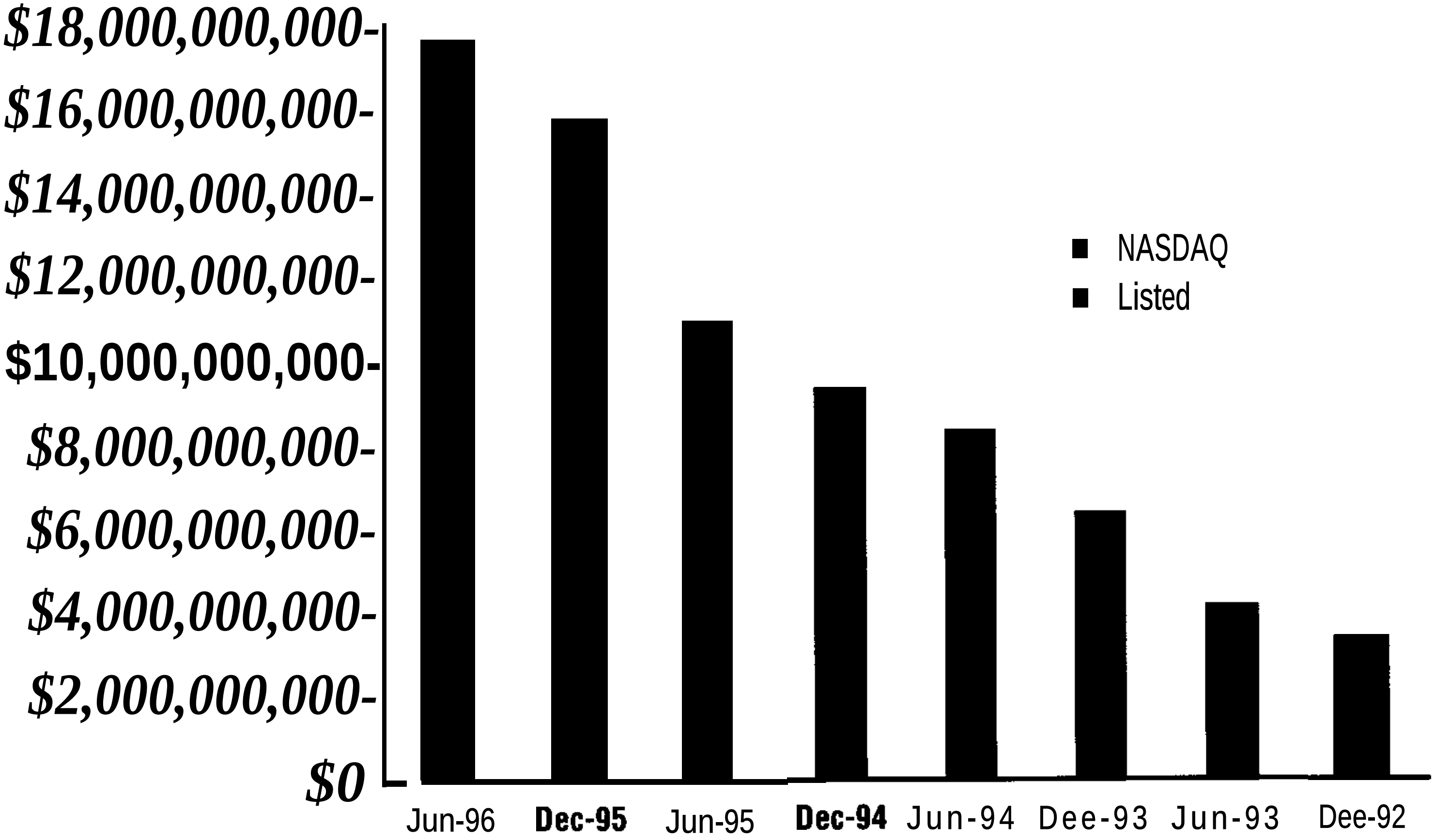
800
999-8073
S
H
W
D
312
986-0580

1/64	015625
1/32	.03125
3/64	046875
1/16	0625
5/64	.078125
3/32	09375
7/64	109375
1/8	125
9/64	140625
5/32	15625
11/64	171875
3/16	.1875
13/64	.203125
7/32	.21875
15/64	234375
1/4	.25
17/64	265625
9/32	28125
19/64	296875
5/16	3125
21/64	328125
11/32	.34375
23/64	359375
3/8	.375
25/64	.390625
13/32	.40625
27/64	.421875
7/16	.4375
29/64	453125
15/32	.46875
31/64	.484375
1/2	5

800-999-8073
SHWD

33/64	.515625
17/32	.53125
35/64	546875
9/16	5625
37/64	.578125
19/32	.59375
39/64	.609375
5/8	.625
41/64	640625
21/32	65625
43/64	.671875
11/16	6875
45/64	703125
23/32	71875
47/64	734375
3/4	75
49/64	.765625
25/32	78125
51/64	.796875
13/16	.8125
53/64	.828125
27/32	.84375
55/64	.859375
7/8	.875
57/64	.890625
29/32	.90625
59/64	.921875
15/16	.9375
61/64	953125
31/32	96875
63/64	.984375
1 0	1 0

Institutional Dollars Traded on Instinet
SEI Corp. Study of30 Buyside Firms



AMERICAN CENTURY℠

Twentieth Century Investors, Inc.
Impact of Non-Traditional Trading on Commissions

	1996	1995	1994	1990
Shares Traded	1,380,178,674	1,058,179,957	944,583,463	362,260,822
Agency Shares Traded	1,138,440,357	888,760,359	798,768,884	263430,758
Non-Traditional Shares Traded**	486,870,624	353,192,447	326,828,468	38,691,600
Non-Traditional as % of Total	35.3%	33.4%	34.6%	10.7%
Commission Cost	$41,870,530	$37,468,382	$34,672,412	$15846,824
Non-Traditional Commissions	$9521,942	$6,778,860	$6,482,166	$1,247,080
Avg. Rate: Traditional Brokers (c/share)	5.0	5.7	6.0	6.5
Avg. Rate: Non-Traditional (c/share)	2.0	1.9	2.0	3.2
TCI Funds Avg. Rate per Share (c/share)	3.7	4.2	4.3	6.0
Non-Traditional Commission Savings	$14,649,803	$13,460,044	$13,040,161	$1,266,445

*Fiscal year 1996 -Nov. 1, 1995 to Oct. 31, 1996.
*'Non-Traditional Brokers: Includes Instinet, Posit, Arizona Stock Exchange, Crossing Network. Data reflects trading in U.S. shares and ADRs only; foreign local shares are excluded.

AMERICAN CENTURY

Twentieth Century Investors, Inc.
SEI Trading Cost Study of Commissions and Market Impact

Principal	'Dollars Traded	Average Market Cap.	Average Volatility	Costs as % of OTC	Costs as % of Listed
TCI Funds Average	$14,142,029,231	11.28	32	1.22	0.89
Broker 1	$1,71 5618,462	13.17	32	1.83	0.85
Broker 2	$1,536,230,769	9.47	31	1.32	1.30
Broker 3	$825397,692	5.06	39	1.58	0.74
Instinet	$2,775,730,000	7.49	43	1.15	0.50
Crossing Network	$383,856,154	12.03	30	0.09	0.55
Arizona Stock Exchange	$192,776,667	12.16	32	1.31	0.63
Posit	$830,283,333	13.66	33	0.75	0.53

SEI Median Volatility for Industry **22%**

*Data reflects non-dollar weighted mean of thirteen six-month periods 06/30/90 through 06/30/96.

Twentieth Century Investors, Inc.
SEI Trading Cost Study of Commissions and Market Impact Most Recent Six Months Period

APPENDIXA-

AMERICAN CENTURY

6/30/96	Dollars Traded	Market Cap.	Volatility	OTC	Listed
TCI Funds Average	33,603,880,000	16.50	38	0.30	0.59
Broker 1	3,415,760,000	28.93	33	1.58	0.46
Broker 2	3,619,780,000	22.48	31	1.93	0.65
Broker 3	2,081,290,000	5.24	45	1.86	-0.16
Instinet	8,538,310,000	10.40	51	-0.46	0.24
Crossing Network	350,060,000	14.12	38	0.37	0.59
Arizona Stock Exchange	132,160,000	15.13	34	0.58	1.21
Posit	1,233,140,000	17.48	41	0.98	1.08

Technology and ECNs -- Forcing New Economic Models on Customers, Brokers and Exchanges

by Harold S. Bradley, Vice President and Director of Trading
American Century Investment Management

Presented at 1997 Mutual Funds and Investment Management Conference

In 1993, the Securities and Exchange Commission issued a call for comment on the structure and condition of the US. Equities markets. The high-sounding "concept release," prompted in part by calls for study by exchange officials and Congressional leaders, focused on technology and markets. The Commission gathered information and issued a lengthy report in January 1994 that paved the way for reforms and technological innovation rushing at investors today.

Citing commentators who "have argued that the current competitive environment has resulted in excessive market ***agmentation*** (emphasis added) and a concomitant decreased efficiency and, at times, liquidity,"[1] the Commission was faced with the King Solomon-like task of deciding whether a capital market structure, often cited in exchange literature as the envy of the world, could tolerate the emergence of efficient alternative trading systems.

Fragmentation. Balkanization. Segmentation. Tiered markets. Highly charged and highly pejorative adjectives employed by those whose traditional business practices were increasingly threatened by newer cheaper and faster technologies that dramatically reduced costs to the investing public. Also implicit in the argument was the "big is bad, little is good" argument as applied to investors. The Investment Company Institute, with its Market 2000 Task Force, reminded both the regulators and exchanges that big institutions are really millions and millions of "little guys" looking for economies of scale in a highly intermediated marketplace.

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1 Letter from James E. Buck, Senior VP and Secretary, NYSE, to Jonathan Katz, Secretary, SEC, January 7, 1991.

To many on the buyside, the Market 2000 Task Force was a call to arms. At American Century Investment Management, we had grown increasingly reliant on new technologies to trade stocks for our investors. We believed, with conviction, that the markets were designed to preserve unnecessary intermediation. In economic terms, anything unnecessary means artificially high costs and we were trusted by our shareholder base both to deliver strong investment performance and to manage and reduce costs. Our very business model was threatened and we asserted a strong desire for regulation that would encourage the natural "evolution of exchanges with specific physical locations, where intermediated transactions may be negotiated, to a concept of a central order driven marketplace, where buyers and sellers can discover price efficiently and anonymously. where investors have instant access to low cost, transparent transaction systems."[2]

Subsequent Enforcement and Rulemaking Activities

Market 2000 proved to be the skeletal structure for a series of studies, enforcement activities and rulemaking that continues today with broad implications for the future of the entire securities marketplace. Within the text of the study, was the blueprint for how the Commission planned to proceed with an eye keenly focused on investor protection, fair practice and open competition between markets and exchanges.

For more than two years, the Commission working alongside the Department of Justice, investigated the activities of some NASD member firms and the NASDAQ Stock Market for anticompetitive business practices. This culminated in findings that "(t)he evidence indicates that instead of dealing as competitors at arms length, certain NASDAQ market makers have coordinated particular trade and quote activities with one another, furthering their proprietary interests at the expense of investors and other market participants. Certain market makers share information with other market makers concerning the size of their customers' orders, and in some instances, the identity of their customers."[3] The resulting censure of such practices, known as the 21(a) report, prompted extensive reforms within the NASDAQ stock market, including significant inclusion of buyside representation on NASDAQ committees and on the NASDAQ board.

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[2] Letter from Harold Bradley, Director of Equity Trading, Investors Research Corp., to Jonathan Katz, Secretary, SEC, November 18, 1992.

[3] "Coordinated Activity Among Market Makers," Censure of the NASD and NASDAQ Stock Market, U.S. Securities and Excahgne Commission, August 8, 1996.

In January, following an 18 month vetting of public comment, the SEC implemented rules compelling the display of customer limit orders to the marketplace and an important "ECN alternative display" rule. Effectively, this rule required NASDAQ and the exchanges to enforce limit order display by all market makers making it immediately available to all members of the investing public on a non-discriminatory basis. More importantly, yet far less understood, it gave U.S. buyside firms the ability to "drive" the National Best Bid and Offer (NBBO) quotes by choosing to display limit orders over several Electronic Communication Networks.

Intermarket Trading System -- Does it Work?

The SEC has already announced its intentions to seriously examine the Intermarket Trading System (ITS), which in some views, forms the basis of an anti-competitive market structure. American Century has asked the SEC to completely reexamine "a patchwork of complicated alterations to outdated, antiquated market definitions and structure. .Technology has rendered obsolete many accepted market terms and structures. The Commission should examine ways to enhance current intermarket quote linkage through the ITS, a necessary component of the National Market System (NMS), as a simple, cost-effective way to protect the public. As in 1978, the Commission must stand ready to "bust" essential exchange-monopoly of ITS and the Consolidated Quote System..."[4]

The 1975 Exchange Act articulated a "future" NMS where buyers and sellers can discover price "without the participation of a dealer." That elusive goal is now inevitable and the Commission should act to encourage markets where investors have instant access to low cost, transparent order-driven systems without sacrificing the protection afforded by intermarket quote linkage.

In a recent TraderForum research bulletin, Morris Mendelson and Junius Peake argue that "ITS is. technologically obsolete. It is merely a transmittal system - a glass "teletype" - which requires human intervention to respond, even when sufficient information has been delivered to create trades."[5] Mendelson and Peake in that description distinctly define the effective difference between an exchange and an ECN.

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4 Letter from Investors Research Corp., to Jonathan Katz, Secretary, SEC, January 13, 1996.

5 "Intermediaries' or Investors': Whose Market is it Anyway," TraderForum Research Bulletin, June 1995, p. 17.

Traditional exchanges have viewed the new order handling rules as an explicit threat and the ITS members (the exchanges), with the explicit exception of the NASDAQ, challenged the Commission's authority to both issue and enforce the new rules. Interestingly, in the ITS attack on new rules, extensive commentary related to the lack of time and opportunity for ITS members to comment on the impact of such changes to market structure.

What about the Buyside?

Unfortunately, the buyside is not exempt from an examination of the inherent structural weaknesses of current stock market structures. Market 2000 not only studied the effects of "payment for order flow" on retail customers in the marketplace but the flip side of the same coin -- institutional payment for order flow in the form of soft dollars, commission recapture and rebate programs.

The Commission launched a "sweep" several months ago during which they visited broker dealers acting as soft dollar agents for investment managers and mutual funds. They collected commission and payment records from brokers who perform such services to match them with 28(e) safe harbor provisions in order to confirm that commissions are used to purchase services that generally benefit investors. Thus far, several high profile enforcement actions have ensued and one has resulted in a criminal lawsuit against a private money manager alleging kickbacks and fraud.

It matters little whether such practices are isolated or widespread. As in the SEC investigation of NASDAQ, the existence of such egregious practices suggests that the structure is broken and needs attention in the form of additional disclosure. The ultimate outcome of this investigation could have a weighty bearing on how the stock market structures of tomorrow evolve because ultimately technology threatens to completely unbundle all value added processes and services from a payment by transaction system.

Institutional Investor Preference for Market Structure

Recent surveys of institutional trader preferences for market structure suggest a recurrent and irrefutable pattern. Academic research and anecdotal evidence increasingly suggests that institutional investors, if given a preference, would choose far different market structures in which to deal than those offered by "traditional" markets.

Bob Schwartz and Nick Economides published a study in May 1994 which disputes the conventional wisdom that asset managers equate liquidity with dealer capital. They "found that the big majority of institutional traders are willing to trade patiently if this helps reduce execution costs. Many traders indicate that they frequently delay trades to obtain better prices. A big majority of respondents indicate that they are given more than a day to implement a large order, that they typically break up more than 20% of their large orders for execution over time, and that it regularly takes more than a day for a large order broken into lots to be executed completely.. The kev motives for trading on (alternative electronic trading) svstems are reduced market **impact,** lower spreads, better **liquiditv** and **anonymity."**[6]

More recently, J. Peake surveyed Institutional Investors' TraderForum, an association of buyside traders, and discovered - not surprisingly - strong preference given to market structures affording order anonymity; full and anonymous disclosure of supply and demand schedules; time priority of entered orders within a price; and multilateral price negotiation capability. Neither the NYSE nor the NASDAQ (prior to limit order display rules) offer investors any of the features that buyside traders deem most critical to effective trading. Instinet, the Arizona Stock Exchange call market --- and the surprising capital markets success story of the 1990s, the Stockholm Stock Exchange, along with Germany's IBIS -- meet many of the traders' expressed preferences.'
(Exhibit Al - AZ)

The sensitivity of buyside concerns to transparency, price time priority and anonymity has extraordinary economic rationale -- especially given the startling revelation in 21(A) that some brokers reveal the size and identity of their customers. Data collected by the Plexus Group indicate that roughly two-thirds of the orders given to buyside trading desks are greater than 50% of the stock's average daily trading volumes, and that 40% of the orders are greater than the stock's average daily trading volume. [8] Orders of this size cannot be traded quickly in a continuous dealer market at acceptable costs.

6 "Assessing Asset Managers' Demand for Immediacy: Equity Trading Practices and Market Structure," Abstract, Nicholas Economides and Robert A. Schwartz, Stern School of Business, New York University, May 27, 1994.

7 "Characteristics for an 'Investors' Trading System," TraderForum, February 2, 1995, prepared by Junius W. Peake, University of Northern Colorado.

8 See Wayne Wagner and Mark Edwards, "Best Execution," Financial Analysts Journal, January/February 1993.

As Exhibit A2 indicates, only Instinet (and now several emerging ECN competitors) offers the majority of the buyside preferred market characteristics. Is it surprising then, that innovators who listen to customers continue to wrest sizable market share and commission revenues away from traditional exchanges? Is it surprising that the ambitious remake of the NASDAQ stock market promises to incorporate many of those features now in practice at Instinet, Bloomberg's TradeBook, the Arizona Stock Exchange or the Investment Technology Group POSIT product.

The growth of dollars traded on ECN's in the past three years constitutes a startling picture. The SEI Corp. semi-annual trading cost study involves 30 or so of the largest mutual fund managers in the country. Those 30 funds now trade almost $18 billion in principal on Instinet every six months (exhibit A4). The percentage of trading dollars attributed to institutions on Instinet constitutes only 20% of that ECN's total business. Consequently, one might reasonably conclude that some $110 to $130 billion trade **every** six months on Instinet. Furthermore, given the **generally** small percentage of institutional **participation,** one might also reasonably conclude that the dealers have a strong business **preference** for transparency, **price** time priority and anonymity.

SEI analysis of 20th Century growth funds show that non-traditional brokers (i.e. Instinet) afford shareholders and clients low cost access to true "liquidity" in both thinly capitalized, difficult to trade stocks and in the most highly capitalized household names. The compilation and analysis of data related to trading costs defies simplistic approaches. The methodology used to compute such costs may fail to account for elusive opportunity costs attributed to "missed" trades, may allow a trader to "game" various standards (i.e. those based on volume weighted average price schemes), and may be so confusing as to render such analysis meaningless. Nevertheless, SEI's methodology does allow for meaningful relative comparison of brokers trading for the same account and the same investment discipline.

In the attached exhibit A6, data from six month trading periods (June 30, 1990 to June 30, 1996) are presented in the aggregate for 20th Century growth funds. The chart displays the simple mean of all dollars traded, average market capitalization, average volatility and total trading costs as a percent of principal for both listed and NASDAQ stocks. The relative efficiency of all private trading systems measured during this time significantly reduced the house "average" cost of trading.

Stocks traded continuously through Instinet's brokerage system exhibited much lower average market capitalization and much higher volatilities than the average for IRC's other brokers during this six year period. The average Instinet market capitalization of 7.49 billion US was about 34% lower than the 11.28 billion US average capitalization of stocks traded in IRC managed funds. Average trailing 90 day volatility of 43% for stocks traded on Instinet far exceeds the 32% volatility for the complex and the 22% volatility that SEI pegs as "median" for managers in its database.

Low capitalization and high volatility would lead most academicians (and principal committing market makers) to expect high relative and absolute trading costs as an unavoidable outcome of the intrinsic difficulty of the trades. Significantly, quite the opposite occurred. Structural efficiencies of the Instinet system produced trading costs on NASDAQ stocks far below the cost of doing business with market makers "net" of commissions in far less difficult stocks - as much as .7% and higher - even with IRC's largest, most capable brokers who frequently use capital to "facilitate" transactions.

Interestingly, all "crossing" markets (Crossing Network, Posit, AZX) delivered well below average cost executions. Institutional anonymity and trader confidence that failure to cross stock during a "match" will not expose an unexecuted order results often in large trades priced at or near the current market.

The most striking feature of this data reflects its constancy over long averages and specific shorter terms. One would expect a degradation of performance as the total dollars traded or percent of business rises in one venue versus another. Startlingly, in the most recent six months of SEI analyzed data (exhibit A7), the trading cost on more than $8 billion of transactions was a negative .46% with the same high volatility, low market capitalization profile. For that same period, the firm's largest traditional broker with a similar "difficulty profile" experienced 1.86% of principal market impact costs. American Century shareholders were able to direct $186 million more to investment securities that would have otherwise been leeched into the system as an unrecorded "cost" of trading for that six month period.

Greenwich Associates surveyed portfolio management and trading executives at 628 of the largest U.S. institutions in early 1995 and found two dominant themes - continuing globalization of investment practice and a startling rise in sponsorship of "nontraditional" trading systems. Greenwich cited the "remarkable rise last year in the percentage of foreign stocks in American domestic institutional portfolios" and the consultant observed that "(t)he question is becoming less one of how great a share of business they place with the non-traditional systems, and more one of how much of a share they need to leave with the traditional ones."[9]

This has important implications for both US. - domiciled brokers and exchanges and for the world's markets seeking to attract this growing share of investment in foreign stock portfolios. Because money managers find that anonymous, electronic access systems reduce explicit commission costs and implicit costs associated with the leakage of information about orders to members of a typical floor-based crowd, capital will be attracted to those countries and to those exchanges which allow institutions to access an exchange directly and anonymously through either a broker guaranteed electronic network or "non-intermediated" electronic access to an exchange directly.

As soon as European regulators begin to compel banks and money managers to inform investors about how well those managers perform, the same cost pressures will force European investment managers to rethink how they view the cost of capital and many generally cozy business relationships. In the United States, transparency of investment results and performance gives meaning to each basis point of performance. Investors' money seeks the best performance, the lowest cost and the highest level of service. Those competitive pressures are only now beginning to emerge in the UK and on continental Europe.

Exchanges view emerging electronic brokers and each other as competitors. The New York Stock Exchange has announced ambitious plans to trade ADRs, local shares and local currency side-by-side and around the clock. Sweden has unveiled an electronic book with depth of market available on Reuters around the world. Frankfurt, under the auspices of ISD, could well introduce new standards of transparency and order systems by incorporating a price, time priority limit order book on IBIS with an opening call market session. As it stands now, the London Stock Exchange will not likely maintain its status in world financial circles. The offices may well stay in London under ISD but trading will likely migrate quickly across borders to more transparent systems.

9 "Future Shocks, Immediate Challenges", Greenwich Reports, p. 1

Technology Will Create New Business Models

Finally, the ultimate global networking of investors and exchanges must lead to a transition, perhaps sudden and dramatic, in the economic terms of trading. Brokers bring much value to the capital formation process. Investment banks bring new companies to small investors and large mutual funds and pension funds alike. Trading houses sponsor stock trading where they have an active, vested interest in investment banking by providing access to management and by utilizing capital to maintain an appropriate percent of trading volume in a firm's identified "names." Brokers have been paid for services "by the share." They have been paid to match buyers and sellers. They have used economic information gleaned from interaction with mutual funds, banks, corporations and governments to arbitrage inefficiencies and make educated bets on the firms' proprietary pads. They have argued strongly that dealer capital and "liquidity" are synonymous terms and that high short term costs are necessary for longer term benefits to be provided by those same brokers "when required."

The advent of technologically advanced ECNs threatens the whole "bundled services" transaction. Instinet, the market dominant model, has been targeted by other new ECNs with new regimes of transparency and pricing. Bloomberg introduced a model that allows a broker to display and trade a limit order for free. Bloomberg introduced a new transparency model that required users to display a limit order and an option with each limit order to maintain a larger reserve order quantity "on the book." Bloomberg offered better technology at 50% off Instinet prices.

NASDAQ now talks openly of combining a computerized call market (Arizona Stock Exchange) to open and close stocks, with a dealer market and the limit order functionality on a central "box" that would look and feel very similar to those of Bloomberg and of Instinet. A user of such a system would "pick a broker" to whom the commission should be directed after a trade is made.[10] Bear Steams and other market makers have announced plans to build and deploy proprietary ECNs. One new entrant plans to allow institutions to place and transact business and "designate" a broker two days later just before settlement to minimize information leakage about transactions.

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10 NASDAQ has clearly listened to the buyside in one important respect in that real estate on the trader's desk is limited. Nobody wants to deal with nineteen NASDAQ firms trying to put a proprietary "pipeline" to NASDAQ on their desk. They would prefer a uniform platform and payment approach. At the same time, one hopes that investigation of current soft dollar practices does not call into question the fairness and objectivity of buyside commission considerations in such an unbundled environment.

Already, discount on-line retail brokers have used low cost electronic efficiency to drive prices to near zero. Brand strategy would suggest that Instinet will likely respond to both Bloomberg and ultimately to NASDAQ by lowering prices and copying features considered an "improvement" over current functionality.[11] They will accept lower margins to protect market share. At the same time, new competitors will pour millions of dollars into system development with revenue projections based on projected rates of return at the time development was started. Ultimately, there will be no ability to improve upon the transparency and priority features of an ECN and price will prove to be the only determinant.

Many exchanges, including both the NYSE and NASDAQ, see clearly this titanic shift of the competitive equilibrium. At the same time member firms invest millions of dollars in systems to be "Instinet killers," those same firms refuse to allow development of appropriate technological responses by traditional exchanges. The economic self-interest of member firms now directly confronts the self-interest of the exchange as a viable entity.

This internal conflict of interest has been remedied in Stockholm where the exchange incorporated an ECN into the heart of the market and recapitalized as a share-owned enterprise where the profits of the exchange and dividend stream reward the members. Recapitalization of the exchange resuscitated a dying institution and spurred tremendous growth both in volume and exchange revenues. The interests of the shareholders are aligned with any system designed to meet customer needs and to grow exchange market share. Just recently, the Svdnev Stock Exchange announced its own plans to recapitalize. Almost concurrently, the Sydney Futures Exchange announced plans for an electronic central limit order book for equities. In the United Kingdom, an influential committee of Parliament has suggested that the current membership structure of the London Stock Exchange may be wholly incompatible with investor needs and interests while the Hone; Kone Stock Exchange explores whether, it too, should offer its shares to public investors.

The technological unbundling of the brokerage business need not attack the basic capital markets infrastructure. Arguably share volume and not dealer capital should be the cornerstone of liquidity. One can easily envision an exchange-centered ECN, a for profit exchange, that shares revenues with its members based on the volume each brings to a central book. The exchange becomes the clearance and settlement agent and charges a fee on all transactions, Those firms (member or otherwise) choosing to do business in that venue benefit directly if they can perform within the top five or top ten of brokers in that stock.

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[11] Instinet has already incorporated the Bloomberg transparency innovation on its order book.

Implicit in this model, is that a broker will attract volume based on agency brokerage skills, superior value-added research, appropriate value-added investment strategies, underwriting and other valued features of the capital markets. Also implicit in this model is that each firm will identify niche stocks that are a profit center for the firm and that those firms unable to consistently compete in certain stocks for market share will be able to identify and exploit opportunities in other stocks less well-sponsored. The ECN (exchange-sponsored or otherwise) could post share volume by market maker for each day of the payment period. The exchange would collect transaction fees and direct them to those firms providing value added services (i.e. volume of shares traded). The use of capital to preserve market share or other trading techniques would not be proscribed in this approach. Broker resources would be targeted to those stocks where strong economic incentives prevailed.

Exchanges must work quickly to evolve into transaction-based systems paying those member firms who provide these important services in each local market. Technology makes it possible to track the business done on a stock-by-stock, and firm-by-firm basis each hour of the day. One can no longer view exchanges as a members only club. One must begin to look with clear, focused vision at exchanges as tollways on the electronic highway. The pace of technological change cannot be regulated. It cannot be negotiated. And it most certainly cannot be ignored.

INVESTORS RESEARCH
CORPORATION

January **26, 1996**

Comment Letter Addendum

Mr. Jonathan G. Katz
Secretary
Securities and Exchange Commission
450 Fifth St., NW
Washington, D.C. 20549

Dear Mr. Katz,

Investors Research Corporation (IRC), the investment manager for the Twentieth Century family of mutual funds, would like to offer additional comment on proposed changes to the "Quote Rule" as outlined in Release No. 34-363 10; File No. S7-30-95, specifically as such changes relate to the listed markets, payment for order flow, preferencing and internalization.

As outlined in the initial comment letter to the Commission, IRC believes integration of agency only third market limit order books into the National Best Bid and Offer (NBBO) through ITS/CAES would enhance public pre-trade transparency and remove economic incentives for payment for order flow.

The practices of payment for order flow and internalization of order flow promise investors an "immediate" price that matches or "improves" the NBBO. Not surprisingly, the established exchanges have called for banning of the practices and have created a set of rules which "preference" the activities of the floor crowds- essentially hiding orders so that any competition for "best price" is predicated on the elusive possibility that an undisplayed exchange order would "improve" the NBBO. The heavily marketed price "improvement" justification begs the questions of whose price is improved (the buyer or the seller, certainly not both) and appears strangely non-competitive as alternative markets are saddled with the affirmative obligation to "prove" that the NBBO is, in fact, the nation's best. This dealerization of the auction market inhibits the full interaction of customer orders.

As an active, involved participant in listed equity markets, IRC must ask why if orders exist in the crowd they are not displayed. The obligation to obtain best price should be predicated on a National Market System with adequate pre-trade transparency and not on having a body in any one of a dozen places where better priced might (and probably do) exist.

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A Twentieth Century Company

Those who rely on the premise that the NBBO is really the nation’s best bid and best offer should not be compelled to prove that a better price does not exist “somewhere” on the floor of the New York Stock Exchange. Practices there of allowing “market go-along” orders, preferencing orders (“clean-cross” rule), and “splitting” stock within the crowd make the essential role of today’s specialist as that of a “dealer” quoting a market around orders.’ Time delays in the handling of orders and arcane, poorly understood priority rules at the NYSE remove that afftrmative obligation to satisfy an order at the publicly displayed price.’

The displeasure with order handling practices in exchange markets arises from a recent series of events where IRC has obtained either price “adjustments” or offers of price adjustments because of irregularities in the handling and display of DOT limit orders.[3]

The NYSE argues that on “a true agency-auction market – customer orders meet directly, without the intervention of a dealer.”[4] At the same time, the exchange argues against further inter-market or “inter-order” linkage through ITS/CAES because “(t)he NYSE is fully accessible through SuperDot and other membership-related vehicles.“’

‘The NYSE insistence that technology be used only for “order delivery” affords less protection to customer limit orders than tbat afforded by NASDAQ’s Small Order Execution System to retail orders. On many occasions. NYSE investigators have defended specialist behavior because of tbe “busy” crowd and “he just didn’t see” the order in a timely fashion. Price improvement marketing jargon now necessitates that the specialist stand between every order‘s trade. Priority means nothing.

[2]Frequently, IRC has observed limit orders displayed in big “crowd” stocks that elicited contra-side orders of matching size on the specialist book. IRC traders often joke about the frequency with which cancel orders sent to the floor result in a “too late to cancel” message and completed execution. Crowd brokers and the specialist “lean on” the displayed limit order.

[3]On January 22, IRC filed complaints with the Institutional Investors Hotline at the NYSE related to the specialist’s handling of DOT limit orders in SEG. On January 24, the Hotline was contacted regarding trades in AXP. In both cases, IRC was offered price adjustments.

[4]*NYSE Comment on Order Execution Obligations.* James E. Buck, January 15, 1996, p. 4.

[5]*Ibid*, p. 6

Ironically, as NASDAZ (through the use of order systems like SelectNet and Instinet) drifts closer to agency auction characteristics, the NYSE devolves more and more into a dealerized, heavily intermediated marketplace.[6] During my three year tenure on the NYSE Institutional Traders' Advisory Committee (ITAC), the institutional constituency chronically demanded more order transparency, a "depth of book" display and time-specific openings of "delayed" opening stocks. A true agency-auction market should have no trouble delivering such pertinent price (and time) information to its customers.

The NYSE, not surprisingly, argues that "existing Exchange order-handling rules (results in) a system that **both promotes transparency and orovides flexibility"** (emphasis added).[7] IRC sees the two as antithetical and borrows from an editorial critical of the London Stock Exchange in Global Investment Technology:

> "A great revolution is underway in institutional investing, and the power of these assets is an immense catalyst for change. Lack of transparency, high market costs, and practices which serve the interests of middlemen rather than the customer are a deficiency in any market and could doom its future. Of course there are (those) who may justify their market structure. They have only to read the writings of the 19" century compatriot, Thomas Love Peacock, who satirized the. .reluctance to seek progress 150 years ago. .Consider this speech by one of Peacock's characters, Seithenyn, on why a dangerously mouldering embankment should not be repaired:
>
> ***'Everything that is old must decay. That the embankment is old, I am free to confess; that it is somewhat rotten in parts, I will not altogether deny; that it is any the worse for that, I do not sturdily gainsay. Our ancestors were wiser than we; they built it in their wisdom: and if we should be so rash as to try to mend it, we should only mar it. The parts that are rotten give elasticity to the parts that are sound If it were all sound, it would break by its own obstinate stiffness: the soundness is checked by the rottenness, and the stiffness is balanced by the elasticity There is nothing so dangerous as innovation. ..'***

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[6]The most discernible difference between the NYSE and NASDAQ today is the strong, independent audit and surveillance capabilities of the NYSE. The institutional hotline has proven responsive and thorough in responding to customer complaints. However, one would like to see tines for rule violations by floor members publicized with the same verve as the fines assessed on Goldman Sachs and First Boston last year for "upstairs" ordering handling violations. One must also note that with a rumored 80% of specialist revenues derived from proprietary trading - the dealer role is augmented with *monopoly* control over public order display.

[7]*NYSE Comment on Order Execution Obligations. James* E. Buck, January 15, *1996,* p. 11

Incidentally, the embankment topples within hours, sweeping the town it protected under the sea, forever."'

IRC believes that ponderous books of rules governing trading practices of traditional exchanges offer prima facie evidence of structural flaws that cannot be regulated or competed away. Only integration of new agency only third market "orders" in to the NBBO will compel greater disclosure of hidden orders. After all, an axiom among brokerage firms is: Order Flow is King.

If order flow is so valuable to broker-dealers, then investors should expect access to timely, pertinent order flow information. Traditional exchanges, thwarted in attempts to innovate by self-interested members, should face competition in supplying that information from innovative systems and structures which seek to reduce the intermediation between buyers and sellers. Absent a complete redesign of current quote and trade information systems, linkage to CQS, ITS/CAES by third market, agency-only firms offers the most "economic" way to inspire true order interaction and pre-trade transparency.

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[8] Pavan Sahgal, ***Keeping the London Market From Submerging,*** Global Investment Technology, September 19, 1994.

TRADERMAGAZINE March1997

Harold Bradley and his traders at American Century in Kansas City. Ma.. are happy with the SEC's order handling rules. Still. they want more reform.

By John A. Byrne

The buyside's pulse is romerimes found in the high-profile opinions that push — occasionally in strong torrents — from a Midwestern-based investment manager for the American Century family of mutual funds.

The head of rrading. Harold Bradley, a thorn in the side of many established exchanges for several years, is a visible symbol of that pulse. These days, Bradley is sending them unequivocal signals — the buyside is growing smug and a little more satisfied each day.

The day after the order handling rules were put into effect, with 50 Nasdaq stocks subject to limit order protection, Bradley exclaimed: "It was one of the most important days in history for stock investors."

Bradley added: "Marker makers will find out that the good ones will thrive under this new environment. Before yesterday, marker making was a capital-intensive business.

"Now with orders driving the market, the use of capital can be priced intelligently by brokers. which means they will be available to trade at the right price."

Cult Following

Bradley. a former financial wire-service reporter. rurned floor trader at the Kansas City Board of Trade. rurned head trader at American Century, has amassed something of a cult following in the buyside. Poster boy? Perhaps. But that hardly comes close to the truth. Bradley's booming voice. intellectual style and deep penetrating eyes are familiar on Wall Street. When Bradley makes noise. it is considered important.

Lately. Bradley has been showing signs of unease in the public spotlight. He politely rurned down a request for an interview one-on-one. Instead, he agreed to an interview surrounded by some of the troops who trade on his desk.

A nice touch. since the truth is that his colleagues are equally effusive. and exceptionally articulate advocates of marker reform. Bradley. who was educated by rhe Jesuits, still keeps company with inquisitive minds.

Joining Bradley for rhe interview were senior equity traders John Wheeler and Greg Bokach. borh former market makers. and Steven Klein. manager of international equity rrading and a former college professor with a PhD in Greek and Roman history. Bakach is also a chartered financial analyst.

All told, American Century's rrading desk. which prides itself on its paperless-based trading technology, has 12 traders, four assigned to international rrading. (The investment management arm, American Century Investments Management Inc.. was formerly known as Investors Research Corp.)

Legitimate Voice

Aside from rhc substantial funds that it manages for shareholders. which gives American Century a legitimate voice in marker reform anyway, rhc firm may have another reason why Wall Street listens. (The firm manages more than $55 billion. representing rhc hard-earned money of two million shareholders.)

There may be something reassuringly solid about American Century. The "heartland of America' feeling that comes from its Kansas City locale is meaningful. Sure. this is a sophisticated, cosmopolitan city, rhe home of great jazz and an arts community, but in popular lore, Kansas City, Mo., hugs farmbelt country. Life seems reassuringly different miles beyond rhe cold and heartless canyons of lower Manhattan.

For more information about any of the American Century℠ Investments funds, including charges and expenses, please call l-800-345-2021 for a prospectus which should be read carefully before investing..

American Century Investment Services, Inc.

> Then something occurred that **approximated an epiphany for** Harold Bradley and his troops: the SEC published its Market 2000 Report.

Interestingly, junior trader Blair Adam, who is currently enrolled in an MBA program at Rockhurst College, farms 300 acres of corn, beans and wheat, and raises cattle on another 700 acres on nearby Johnson County land.

As recently as 1993. American Century was quietly going about its daily business. Then samerhing occurred that approximated an epiphany for Harold Bradley and his troops: The Securities and Exchange Commission published its Marker 2000 Report.

Prejorative

"We had no public profile up to 1993," Bradley said. "When we read Marker 2000 we felt compelled to action. The SEC described rhe existence of Private Trading Systems — which arc known today as Electronic Communications Networks — as fragmenting, balkanizing and segmenting rhe marketplace that wc considered extremely prejorative.

"These are not friendly words or sponsoring words. We as a firm had already committed to various technologies and trading processes. We fclr it was imporranr to comment loudly and aggressively in defense of this technology and competition."

Bradley's troops were fully behind him.

Said Klein: "As our interest in new trading systems and methodologies developed. and as there was an opportunity for some extraordinary cost savings. borh implicit and explicit, we recognized that rherc war a possibility these systems could be threatened."

Practical Application

American Century was most concerned with rhc practical application of these technologies — specifically how rhey might harness ir far price improvement opportunities, lower transaction costs and pass along "implicit savings" to shareholders.

The SEC received nearly 60 comment letters to its Market 2000 study from exchanges, broker dealers, academics and others. It is instructive that American Cenrury was one of four received from the buysidc.

Wheeler said the culmination of some of rhc buyside activism was evident today in rhc order handling rules. "[Previously] broker-dealers, in effect, used the customer orders as an option and did nothing but enrich themselves," he said.

American Century is a firm in a hurry, pressing and prodding regulators and decision-makers in rhc securities markers. domestically and globally. "Regulators listen to us because wc are promoring fair and open markets," Bokach said. "They know we have no hidden agenda."

Last summer. Klein tired off a letter to London's Securities and Investment Board in response to proposed changes in rhc structure of the equity markers in the U.K.

American Century has reason to be concerned. It has $6 billion to $8 billion invested in non-U.S. equities. Much of ir is directly impacted by developments in London.

Typical Flourish

In a typical flourish, Klein said American Century believed that rhe traditional quote-driven marker structure in the U.K. had become "increasingly ineffective" and an expensive anachronism.

Klein was passionare and pulled no punches. He wrote of American Century's advocacy for rhe dismantling of rhc "dealer-dominated" marker structure in rhc U.K. and of rhc implementation of an order-driven structure rherc.

American Century welcomed rhe adoption of such a structure on the London Stock Exchange, but he noted that rhe "privileged position" of traditional marker makers was an issue for discussion.

A few years earlier. American Cenrury castigated the U.K. markers for "allowing trades to be reported out of sequence: hours. days or even weeks after a transaction. Even institutions asking for a broker's capital have no way of determining whether it has obtained 'fair' prices for its investors."

Bradley put it succinctly: "Barriers to marker competition and access in London emanate from those whose traditional control of marker structure is threatened."

Fervor

Wirh fervor reaching messianic-style proportions, Bradley is clear about where he wants equity markers headed. Bradley wants markers that provide for order interaction and disclosure of orders to rhe marketplace as a whole.

American Cenrury rradcs heavily on electronic systems such as Instinet, and rhe Arizona Stock Exchange because they are "anonymous and efficient." In one study, American Century maintained it saved 50 to 300 basis points over the traditional brokers on the round trip.

During the twelve months ended Oct. 31. 1996, American Cenrury clients paid more than $100 million in commissions, Nasdaq credits and underwriting concessions to execute the firm's business. The firm traded more than 600 million shares an non-rradirional electronic systems over rhe period.

American Cenrury has other data that suggests that over a six-year period it has executed its most difficult trades — in terms of rrading the smallest marker cap stocks and the highest volatility — on non-traditional systems. Marker impact over time, consequently, has been lower than business in traditionally intermediated trades.

No wonder the trading desk is busy commenting on marker design and competition.

Said Bokach: "We arc living in an environment where the regulators are trying to promote the efficacy of rhc marker. and to show that we are open and fair in the U.S. Thar is imporranr as our markers become more global. 24 hours a day."

Unrestrained

While non-traditional systems are imporranr to the firm. American Cenrury has reservations about unrestrained growth in certain machines.

Far one thing, Bradley is worried about a plethora of ECNs populating Wall Street in the wake of the order handling rules. Simply put, he doesn't think this would be good marker structure. Bradley doesn't want an array of new boxes giving him pricing data.

"You have new people coming to rhc table with ECNs," Bradley said. "How are they going to rake market share? Discount their prices and use better technology? If someone comes in with a system better than Inrrincr, what does Inrrincr do? They copy it and they protect rhcir marker share.

"So if you take it to its logical conclusion, you are going to remove the profitability. Unless the [Nasdaq] member firms decide to collaborate and work together, you are going to end up with a little bir of profitless prosperity. A lot of cash flaw bur not a lot of margin."

American Century traders would rather turn the focus to other developments, and these include call markers, such as the system developed by Oprimark.

Anonymously

Optimark enabler buyers and sellers to interact on rhe basis of "satisfaction" and on the willingness of each parry to trade at various pricer and sizes. Trades are marched electronically and anonymously. and are nor "given up."

Indeed, Bradley contends it is stretching the truth to suggest that broker-dealers and specialists, by committing their capital, create markers and improve liquidity. In his view, broker capital, immediacy and liquidity are nor synonymous. Rather, orders create liquidity.

American Century has doled out criticism of marker structure in equal measure to Nasdaq and to The New York Stock Exchange. The firm's criticism of Nasdaq is well known. Asked to comment on the Big Board. Bradley laughs off the notion that the exchange lives up to its reputation as an auction marker.

"I've never been to an auction like it where somebody bid $20 million for a painring. the next guy bid $25 million. and the next bid $30 million and rhe auctioneer says: Sold to you, you. you. The rules in New York do nor constitute an auction."

Order Flow

How will the order handling rules affect the Big Board? Said Wheeler: "The crowd that stood around the specialist and preyed off rhe legitimate order flow is using no more than an option from their own pocketbooks. They are the people that will be hurt rhc most."

There are some traders on rhc buyside who arc as equally outspoken, albeit off the record. as American Century's traders arc about market structure. And rhey beg to differ with Bradley and his troops.

Some traders think trading systems don't necessarily provide better prices. Though rhey utilize alternative trading systems, these traders are comfortable dealing wirh brokers. Anonymity is fine. bur machines don't act like humans when important news breaks an a big stock, these traders contend. Many of rhcm said they have strong relationships with rhcir brokers and the information these brokers disseminate sometimes serves them better than electronic systems.

Another trader was quoted elsewhere saying, "Concern about anonymity is not an issue..." The trader asked. "If I do half a million dollars worth of business with a brokerage firm, would it be so dumb to put my name out on rhc Street? When would I trade with it next?"

American Cenrury is paying close attention to rhe SEC's current sweep of soft-dollar practices in the industry. The fund has long disowned rhc practice. raying it is rife with conflicts of interest. Under soft-dollar arrangements. a fund pays a broker a commission to buy or sell securities, and in return effectively receives a rebate in the form of products and services.

"If a *Wall Street Journal* subscription costs you $100 and you pay it yourself. that's $100 lost to you." Wheeler said. "If you soh it, that is $100 in shareholders' assets lost. It is this practice of moving your expenses off your books onto the shoulders of your shareholders that we object to," he added.

Legitimate

American Century once received a list of 581 "soft-dollar" services available through a Wall Street firm. There were some legitimate rounding items all right, but more than a fair share of questionable ones.

Among the "research" providers that could be procured with soft dollars: a Baltimore office-supply store and telephone companies. including AT&T. American Cenrury once calculated that it could "add $6 million" to its bottom line if it rook soft dollars. But it said that would be $6 million in excess costs far mutual fund shareholders and other customers.

"We have a mission at American Century and it rounds very Midwestern," Bradley said. "That mission really comes down from the top of rhe firm. We work for our shareholders. We arc nor looking to maximize short-term profit opportunities for rhc firm." TM

APPENDIX E

Harold S. Bradley

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PROFESSIONAL EXPERIENCE

3/88 - Present | **American Century Investment Management, Inc. (ACIM)** | Kansas City, MO
Vice *President, Director of Equity Trading*

Manage global equity, futures and foreign exchange trading activity for a mutual fund family of 62 no-load funds with more than $50 billion under management and two million shareholders. Direct trading desk which handled transactions valued at more than $60 billion in the year ended October 3 1, 1996 and paid commissions, implicit NASDAQ credits and underwriting concessions of more than $100 million. ACIM traded more than 600 million shares on Non-traditional Trading Systems. Active voice for customer-oriented market reforms including NASDAQ limit order display rules, disclosure of "hidden" limit orders on the New York Stock Exchange, and disclosure of investment advisor "soft dollar" practices. Member of senior management advisory group on strategic issues and long-range planning.

1983-1988 | **Kansas City Board of Trade** | Kansas City, MO
Proprietary Floor Trader

Member of the Kansas City Board of Trade. Traded proprietarily with specialty in Value Line and SP500 Stock Index futures contracts; also traded bonds, foreign currency and agricultural futures contracts and options. Member of the membership and marketing committees of the exchange.

1981-1983 | **Kansas City Board of Trade** | Kansas City, MO
Director of Marketing

Staff support for KCBOT membership organization in newly created position. Successfully introduced Value Line futures in 1982, the first CFTC approved stock index futures contract. Worked extensively with research staffs of major futures commission merchants and engaged in numerous retail-oriented investment seminars. Principal media contact for the exchange. Planned and executed $1 million marketing and advertising budget.

1979-1981 | **Commodity News Service** | Leawood, KS
Market Reporter

Analyzed and reported trends and conditions in agricultural commodity markets for this division of Knight Ridder Financial Services. Edited copy for use on Farm Radio News wire and acted as primary market reporter at the Kansas City Board of Trade.

EDUCATION

1981-1982 **Rockhurst College** Kansas City, MO
MBA level courses in finance, economics, marketing.

1975-1978 **Marquette University** Milwaukee, WI
BA, Journalism. *Summa* Cum *Laude, Phi Beta Kappa,* and first in the class in the College of Journalism. Minors in political science and philosophy. Completed four year program in three years.

ADVOCACY AND INDUSTRY INVOLVEMENT

- NASDAQ Quality of Markets Committee.
- ICI Task Force in Market Structure.
- Institutional Investor TraderForum.
- Security Traders' Association Institutional Committee.
- Executive Committee member, Financial Information Exchange (FIX) protocol; effort to develop and implement industry standards for broker to institution electronic communications.
- Drafted and submitted comments to the Securities and Exchange Commission Market 2000 study; to the Securities and Investment Board study of stock market rules and structure in the U.K.; to the SEC regarding order disclosure practices.
- Extensive public speaking on market structure issues at industry conferences and at forums held at 1994 CCH Mutual Funds Conference, New York University, PACE University, the Frankfurt Stock Exchange, the European Capital Markets Institute and the 1997 Mutual Funds and Investment Management Conference.
- Former member of Institutional Trader Advisory Committee, NYSE.